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Identifying and addressing equivocal trouble in understanding within classroom interaction

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Maintaining intersubjectivity is crucial for accomplishing coordinated social action. Although conversational repair is a recognised defence of intersubjectivity and routinely used to address ostensible sources of trouble in social interaction, it is less clear how people address more equivocal trouble. This study uses conversation analysis to examine preschool classroom interaction, focusing on practices used to identify and address such trouble. Repair is found to be a recurrent frontline practice for addressing equivocal trouble, occasioning space for further information that might enable identifying a specific trouble source. Where further information is forthcoming, a range of strategies are subsequently employed to address the trouble. Where this is not possible or does not succeed, a secondary option is to progress a broader activity-in-progress. This allows for the possibility of another opportunity to identify and address the trouble. Given misunderstandings can jeopardise interactants' ability to mutually accomplish courses of action, these practices defend intersubjectivity against the threat of equivocal trouble.

Keywords: Intersubjectivity, displays of understanding, equivocal trouble, repair, preschool, children, teacher, classroom, Internet, conversation analysis.

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Introduction

Shared understanding is a mundane, routine, and largely unnoticed social accomplishment. This intersubjectivity enables people to transcend their private perspectives and collaborate on mutually-recognisable courses of action (Heritage, 1984). Through detailed investigation of conversational repair, research undertaken within conversation analysis has demonstrated a unique capacity to generate an empirical account of the practices people that use to maintain intersubjectivity (Heritage, 1984; Schegloff, 1992; Schegloff, 2006). In contrast to this existing research, however, which has largely focused on ostensible threats to intersubjectivity, this article illustrates that identifying such threats is not always straightforward. Nevertheless, using the methods of

conversation analytic research we show how a recipient to a potential trouble in understanding responds in systematic ways to identify the nature of the problem and to address it accordingly.

A foundational method that people use to establish and maintain intersubjectivity is through contributions to their interactions with one another. By making a contribution, whether through a turn at talk or some other communicative act like gesturing, a participant displays their understanding of what has preceded their contribution (Edwards, 1993; Heritage, 1984; Macbeth, 2011; Moerman and Sacks, 1988; Sacks, 1992; Schegloff and Sacks, 1973). For example, in a routine home visit following the birth of a baby, a community nurse observes that baby's behaviour and remarks "he's enjoying that isn't he". The child's father responds "yes, he certainly is", displaying an understanding of the nurse's remark as a mere observation. In contrast, the child's mother responds "he's not hungry cuz he's just had his bottle", displaying an understanding that the nurse may be implying the child requires feeding (Drew and Heritage, 1992). In making sense of one another's conduct, the sequential ordering of contributions to an interaction can be an important resource. This enables participants to interpret one another's contributions on the basis of its congruence with prior contributions, including the immediately prior turn (Schegloff and Sacks, 1973) as well as broader contributions to an extended sequence of action (Schegloff, 1990). In the same way that participants' contributions display their understanding of others' contributions to the interaction, participants' conduct can also display understandings of the social and physical world beyond their current interaction (Hester and Francis, 1997; Davidson et al., 2014).

Many types of educational encounters, especially those that are classroom-based, are hallmarked by a three-turn sequence (Sinclair and Coulthard, 1975; McHoul, 1978; Mehan, 1979; Bellack et al., 1966), comprising an initiating move (e.g., a question), a responsive move (e.g., an answer), and a reactive move (e.g., an assessment). Among other things, these sequences provide for displays of understanding (Edwards, 1993; Hester and Francis, 1997; Macbeth, 2011; Mushin et al., 2013). In particular, the response components of these sequences, which are overwhelmingly produced by students following teachers' questions, display understandings of whatever is being discussed. These displays can convey different levels of understanding (Koole, 2010; Sacks, 1992). They might *demonstrate* understanding by providing information that establishes the speaker's understanding as independent of the information already available within the interaction. For example, following a teacher's description of how to locate eight o'clock on a sunshine chart, a student demonstrates her independent understanding of how to interpret that chart by claiming "this is nine o'clock" (Koole, 2010).

In contrast to demonstrations of understanding, participants can also *claim* understanding, but without providing information that would enable an interlocutor to identify the basis for that understanding. For example, following a teacher's explanation of how to draw a graph, a student responding "yes yes I get it" *claims* understanding, but does not actively *demonstrate* an understanding of how to draw a graph (Koole, 2010). Participants' contributions therefore convey greater or lesser details about their level of understanding. The sequential organisation of participant's contributions to an interaction thus provides an 'architecture of intersubjectivity' (Heritage, 1984), which enables participants to determine – to greater or lesser extents – whether they share an understanding of some aspect of the world they are discussing. This can be especially important for educational encounters involving young children. This study examines how intersubjectivity can be defended in a setting where one party's competence – that of a child – is liable to being questioned (Mackay, 1974; Baker and Freebody, 1989).

Insofar as sequence organisation establishes an 'architecture of intersubjectivity,' this organisation also enables identification of gaps, breakdowns, and divergences in intersubjectivity. Where this occurs, repair organisation provides for the defence of intersubjectivity (Schegloff, 1992). Although it

is recognised that repair is particularly important for intersubjectivity in educational contexts (Macbeth, 2004; Macbeth, 2011; McHoul, 1990), further research is required to understand how practices of repair relate to broader activities and roles pursued by educators and learners (Gardner, 2013). Further exploration of alternative practices to repair, such as those that create spaces for alternative understandings to be proffered (Hester and Francis, 1997), is also needed. The current study attends to this by considering how participants address equivocal trouble in the classroom.

Method

The data reported here were collected as part of a study that investigated how teachers and students engage in Web searching in Australian preschool classrooms that cater for children aged between three and five years. Between May and November 2012, approximately 170 hours of classroom interaction were recorded across nine preschool classrooms in south-east Queensland. Two video cameras were used to record different perspectives. Research assistants operated the cameras and moved around the classroom in response to shifts in activity. An additional perspective of computer use was recorded using screen capture software.

The present study utilises the methodology of conversation analysis (Sidnell and Stivers, 2013). This approach provides an alternative to those that principally focus on pre-theorised global orders of discourse, such as asymmetrical power relations between teachers and students. Instead, the primary analytic focus in conversation analysis is how discursive practices are used to accomplish recognisable social actions (Macbeth, 2003; Schegloff, 1997c). The aim of the present study is to utilise established findings to progress understanding of practices that are used for addressing equivocal sources of trouble. Although informed by an examination of the entire corpus of data, we achieve this aim through single case analysis. This approach is well suited to utilising existing findings to identify novel interactional practices (Schegloff, 1987a), particularly when focusing on the broader organisation of extended sequences of action (Psathas, 1992). A single case study thus enables an exploration of aspects of interaction that have relevance for organising the use of language within social encounters.

The data were transcribed according to the Jeffersonian system used within conversation analysis (Hepburn and Bolden, 2013). One adaptation was to use all capital letters for teacher speaker labels, in order to make clear the difference between teachers and students. Where it is unclear which student contributed to the interaction, this was transcribed with the label 'St' rather than a pseudonym. Close analysis of the video recordings and their transcriptions facilitated development of a multimodal analysis considering verbal and non-verbal conduct, and computer screen activity.

Analysis

Addressing unequivocal trouble

The fragment below is included as a point of contrast for the subsequent focus on attempts to address equivocal sources of trouble. This instance illustrates how teachers can readily address unequivocal misunderstandings. Extensive conversation analytic research investigating repair and correction in both mundane social encounters (Schegloff, 1992; Schegloff et al., 1977) and classroom interaction (Macbeth, 2004; McHoul, 1990), establishes how these practices can be used readily in response to the emergence of an apparent source of trouble, including misunderstandings. In Fragment 1, an apparent source of trouble is a student's understanding of the communication technology they are about to use. Around 100 seconds prior to the beginning of this fragment, the teacher, Miss Sally, has been explaining to the class that a former teacher, Miss Pam, has asked the class to send her an email. This fragment begins with a teacher's aide, Miss Linda, crouching under

the table to plug a device into the computer. The references made by Sally at lines 3-4 and one of the students at line 6 are in relation to this device.

Fragment 1 [KWeb: Centre 6, 31 Oct 2012, 02:10-02:29]

01 SAL: Oh:kay.
 02 (0.2)
 03 SAL: Poo:r Miss Li:nda has to scurry on the floor and put some things
 04 into the computer.
 05 St1?: ([])
 06 St2?: [It's for seeing] Miss Pa:m. >On the< com[puter.]
 07 St1?: [(Miss)] Sa:lly:?=
 08 SAL: =>We won't< see Miss Pam. Wu- We're not doi:ng, we're not doi:ng,
 09 u:[hm [Sky:]pe.
 10 St2?: [.hh [I'm]
 11 St2?: I miss: [I : : : ' m :]
 12 SAL: [I know that othe]r
 13 ti[:mes we've done Sky:pe, >but w]e're<=
 14 St2?: [I m i s s M i s s P a m,]
 15 SAL: =not d[oing S]kype we're [doing e:]mail.
 16 St2?: [I:-] [I: miss]
 17 St2?: I: miss ((continues))

At line 6, a student displays an understanding about a device being plugged into the computer that has just been referred to by Sally at lines 3-4. The student's claim about the device, "It's for seeing Miss Pa:m. >On the< computer.", displays an apparent understanding that it is a webcam.¹ Sally's next turn is a third position repair (Schegloff, 1987b; Schegloff, 1992; Schegloff, 1997b), correcting the student's understanding by rejecting the claim that they will be able to see Miss Pam (line 8), and explaining they will not be using *Skype*TM (lines 8-9, 12-13, and 15) but rather will send her an email (line 15).

The student's claim at line 6 thus displays an unequivocal misunderstanding that Sally can correct using third position repair. A primary constraint on this particular repair practice is an interlocutor's display that the participants are not utilising the same understanding of some aspect of the world (Schegloff, 1992) – in this case, what the "things" being plugged into the computer will enable the class to do. In contrast to unequivocal troubles such as these, which have been the predominant focus in existing research on repair (cf. Schegloff, 1992: 1331-2), our study focuses on practices used where there is equivocality about the nature of a misunderstanding. In particular, although previous research has considered difficulties in identifying the *specific* basis of an otherwise ostensive misunderstanding (Schegloff, 1992: 1331-1334), we focus on equivocality in relation to whether there is even misunderstanding in the first place.

Addressing equivocal trouble

The remainder of this article focuses on a single episode of interaction in which a teacher attempts to address an equivocal source of trouble. The primary reason for using a single case analysis approach (Schegloff, 1987a) is frequency. In the 170 hours of classroom data collected, we only located this one instance where a teacher was addressing an apparently equivocal trouble. This phenomenon may be relatively infrequent because the moment-by-moment progress of interaction

¹ Inspection of the broader episode from which this fragment is taken reveals the device is a digital camera, which has been used to take still photographs that are subsequently attached to the email the class is composing. At this point in the interaction, however, in data not shown here, this device has only been referred to indirectly by Sally as "the camera." There is therefore scope for the student at line 6 to understand the camera as a webcam – which would be used to enable a video call – rather than as a digital camera used to take still photographs.

provides for the progressive determination of intersubjectivity (Heritage, 1984; Schegloff, 2006); Where there is a possible threat to intersubjectivity, people generally identify an ostensible source of trouble and address this with an appropriate repair practice (Schegloff, 1992; Schegloff, 2006). Although they may be relatively uncommon, equivocal sources of trouble warrant analysis as they afford opportunities to extend understanding of the methods that people use to promote intersubjectivity.

Another reason for a single case study approach is breakdowns in intersubjectivity can become protracted (Ekberg, 2012; Schegloff, 1992). A detailed focus on how such breakdowns are occasioned, sustained, and whether and how they are resolved is necessary to determine resources people use in extended attempts to identify and address equivocal trouble. Our analysis identifies a set of practices used to address such trouble. Across several fragments we document how each practice is used, sometimes recurrently, and eventually overcomes a potential and yet equivocal trouble.

The focal episode involves a teacher called Sheree and three students: Hanna, Naomi, and Sally. These participants are searching the World Wide Web for an image of a tick resembling the one that had bitten Hanna the previous evening. In just under nine minutes they locate an adequate likeness. Before this is achieved, however, Hanna consistently rejects a series of candidate likenesses, which poses a problem for Sheree's facilitation of the search.

As the episode progresses, it becomes apparent there are two possible explanations available for Sheree to appreciate why they have failed to achieve the goal of their search. The first is simply that they have not yet located an adequate likeness. A second is that there is a problem with Hanna's understanding of the images on the screen, which impedes locating an adequate likeness. These alternative possibilities provide an analytic opportunity to explore practices people use to address equivocal sources of trouble in interaction.

In documenting the practices that Sheree employs to address the equivocal trouble, we consider five fragments from this episode (a transcript of the broader encounter from which these fragments have been taken is available as an appendix). The first fragment follows a collaborative task in which the teacher supported the students to type the word 'ticks' into an image search engine, followed by an initial inspection of the search results. Hanna has already selected an image that Sheree copied into a word processing program. As Sheree returns to view the search results, she asks whether the image they have just copied resembles the tick that had bitten Hanna the previous evening. This occasions space in which Sheree seems to infer that Hanna has misunderstood the scale of the image on the screen.

Fragment 2A [KWeb: Centre 3, 17 Sep 2012, 03:54-04:29]

165 SHE: Are there any other pictures [that you wanted Hanna?<Is] this-
166 Han: [((N o d d i n g))]
167 SHE: is it- does this one look like the one that was on you:?
168 Han: ((Bobbles head from side to side and scrunches face)) N: o::.=
169 SHE: =↑It doesn't?↑
170 (0.2)
171 Han: [It [it- [it (was-)]
172 Sal: [Is [it [s i m i l]ar?=
173 Han: =((Turns to face Sheree)) It was a <little one.>
174 SHE: >Oh was a little one< [was it.<Okay let's have a look then.
175 Han: [((Turns to face computer))
176 (2.1)
177 Sal: Whic[h one wa]s it Hanna:
178 SHE: [O:kay,]
179 Han: It ha:s little cla::w, (0.4) (°a:nd u:hm:°) (0.2)

180 Nao?: (Din son wo)=
 181 SHE: =This one- this one would actually be quite little it's just
 182 that they've <blo:w>n it up. Like under a magnifying glass to
 183 make it look big.
 184 Han: ((Pointing)) I don't th:ink it's ((starts moving finger)) that
 185 one. It's ((points to another part of the screen)) that ((stops
 186 pointing)) one ma:ybe:,=
 187 SHE: =You think it might be that one,
 188 Han: ((Nods once)) Yes:.

Our goal in analysing this fragment is to account for Sheree's explanation, at lines 181-183, of how the tick on the screen could seem bigger than the tick that was on Hanna.² In particular, we show that this explanation can be attributed to an inference, made by Sheree, that Hanna has misunderstood the scale of the image on the screen. The context of Sheree's explanation is occasioned by her question at line 167, asking whether the tick on the screen (see Figure 1) resembles the tick that was on Hanna. The rejection of this likeness (line 168) poses a potential problem for their search. Although it is clear that they have not yet identified an adequate resemblance, it is not clear how the image on the screen is different.



Figure 1. Focal image across lines 165-185

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Sheree's next turn is designed in response to an unsubstantiated rejection that has been made by Hanna. Her prosodically marked question (Selting, 1996), "It doesn't?" (line 169), occasions space in which Hanna might further comment on the likeness of the two ticks. This is successful, insofar that Hanna subsequently explains that the tick on her "was a <little one.>" (line 173).

Hanna's reference to size can be understood as a relevant account for the difference between the two ticks. If the tick that was on Hanna was 'little,' then the tick on the screen must be a different size (that is, bigger). Superordinate categories like 'size' and subordinate categories like 'little' can enable inferences that extend beyond what a speaker has said (Sacks, 1992: V1: 113-125). In this instance, Sheree has already been informed that the ticks are different and, having occasioned space in which Hanna might account for that difference, is then informed that one was 'little.' Given the

² Although the tick did indeed bite Hanna, and this was discussed in an interaction involving the entire class, there is no actual reference to biting while Sheree and the students are searching for images. In correspondence with the references used by participants during this particular episode (for example, at line 167), we refer to 'the tick that was *on* Hanna.'

ticks are different and one is described as ‘little’ as an apparent point of difference, an inference about the other tick can be made by selecting a contrastive category within a superordinate category that subsumes both (Bilmes, 2009). In this case, ‘little’ can be subsumed under the superordinate category ‘size,’ which contains the contrastive category ‘big’ (Murphy and Jones, 2008).

So if the tick that was on Hanna was little, there is scope for inferring the tick on the screen must be big or, at least, bigger.³ Indeed, Sheree later clearly indicates, at line 183, that she has understood Hanna’s claim to imply that the tick on the screen is big. More immediately, such an inference seems to underpin Sheree’s acceptance, at line 174, of this explanation as an adequate account for the difference between the ticks. The impediment to completing their search is thus established as a failure to locate an adequate likeness, and Sheree addresses this by continuing their activity.

Having established the impediment as failure to locate an adequate likeness, there is subsequently grounds for Sheree to infer the impediment might actually be a misunderstanding by Hanna of the scale of the image on the screen. This is occasioned by Hanna’s explanation that the tick that was on her “*ha:s little cla:w*,” (line 179). Although Hanna’s explanation has only shifted from the generic littleness of the tick that was on her to the littleness of its “*claw*,”⁴ this results in Sheree responding in a substantively different way. Using the same inferential process described above, Hanna’s mention of the little claw on the tick that was on her provides a basis for Sheree to infer that the tick on the screen must have a big, or bigger, claw. Such an inference, however, leads to a problem, as the tick on the screen (see Figure 1) does not have a particularly big claw.

Where Hanna’s previous explanation of generic size made it possible to attribute the impediment for the search to failure locating an adequate likeness, her subsequent reference to the size of the tick’s claw makes it possible to attribute the impediment to a misunderstanding. This shift accounts for the different approach Sheree takes in lines 181-183 to her earlier response at line 174. She now explains how the two ticks could be the same size, even though the former might look bigger. Sheree’s explanation treats Hanna as having made a scale error⁵ by failing to appreciate that the tick on the screen is bigger than it would appear when seen without magnification.

The problem with inferring a misunderstanding, however, is that there is no basis for being certain that such a misunderstanding has occurred. It is also possible that Hanna perfectly understands the scale of the image and the problem is simply that the image does not resemble the tick that was on her. Hanna has a much higher epistemic status (Heritage, 2012) in this regard: she was present when the tick was on her, Sheree was not. The design of Sheree’s turn at lines 181-183 suits an equivocal misunderstanding. She does not use a practice like third position repair, which is suited to addressing clear misunderstandings (Schegloff, 1992). Rather, Sheree’s explanation does not orient to a clear misunderstanding but does provide information that may correct any misunderstanding

³ It may well be the case that the tick on the screen is ‘bigger’ than the tick that was on Hanna. In data not shown here (but which is available at line 116 of the appendix), Sheree commented that the tick displayed in Figure 1 was “all swollen up.” So it is possible that the tick that was on Hanna was not as swollen as the tick on the screen. As will become apparent in the subsequent interaction, however, Sheree soon appears to supplant this interpretation with an inference that Hanna has misunderstood the scale of the image on the screen.

⁴ Hanna’s mention of the tick’s “claw” is most likely a reference to its mouthparts (Sonenshine & Anderson, 2014), an illustration of which is available as Figure 4.

⁵ Although previous experimental research has identified scale errors being made by children up to the age of two and a half years old (DeLoache et al., 2004; Ware et al., 2006), we are not aware of any research exploring scale errors in children aged three to five years, the age range of participants in the current study. The present study is not designed to establish whether and how frequently children in this age group might make scale errors, but does show they are liable to having such an error attributed to them.

resulting from a scale error. If, however, there is no misunderstanding, then Hanna can respond in a way that does not orient to the possible correction.

On this occasion, Hanna responds in a way that is indicative of the latter option. She does this by rejecting the image they have been looking at, and suggesting a possible alternative likeness (Figure 2). Irrespective of whether she has misunderstood the scale of the image on the screen, her turn at lines 184-186 leaves little scope for Sheree to continue addressing such a misunderstanding. At line 187 Sheree therefore aligns with Hanna's suggestion of an alternative possible likeness. Hanna and Sheree's continued discussion of this alternative likeness, however, is circumvented by Sheree's subsequent noticing of another image. In data not shown here, but which is available in the appendix to this article (see from line 189), Sheree's noticing eventually leads to the discussion of another image, which is the focus of Fragment 2B.



Figure 2. Focal image across lines 185-188

"Ticks before and after feeding" Bjørn Christian Tørrissen

http://en.wikipedia.org/wiki/Ixodes_holocycclus#/media/File:Tick_before_and_after_feeding.jpg CC BY-SA 3.0

<http://creativecommons.org/licenses/by-sa/3.0/>

The practices for addressing an equivocal trouble identified above can be repeatedly observed throughout the broader episode of interaction. Where an equivocal source of trouble emerges, Sheree attempts to occasion spaces in which Hanna could modify a prior claim (Hester and Francis, 1997), or provide information in support of that claim (Robinson, 2009). The former outcome is not manifest in this interaction, although the latter possibility is often realised. When this provides scope to do so, Sheree infers a source of trouble and addresses it appropriately (e.g., lines 184-186). When this is not possible, or an attempt to identify the trouble is unsuccessful, a secondary option is to progress an activity without addressing the equivocal trouble (e.g., line 174). By progressing the activity, it is possible another opportunity will arise to identify and address the trouble (Schegloff, 1992). The remainder of our article establishes how these practices are used repeatedly in Sheree's attempts to address this impediment to their search. We will argue that these are systematic practices for identifying and addressing equivocal trouble in understanding.

The next fragment begins around 90 seconds after the end of Fragment 2A and involves discussion of another image now displayed on the screen. This fragment affords further opportunities to examine how Sheree addresses the equivocal source of trouble impeding their search.

Fragment 2B [KWeb: Centre 3, 17 Sep 2012, 05:56-06:57]

245 SHE: If I clo:se this, there's some i:nforma:tion here. Look. It
246 s:a:ys, t_icks: a:nd pe:opl:e, in the Austra:lian bush:.

247 (0.4)
 248 SHE: And there's one the:re look.
 249 (0.2)
 250 SHE: ((Pointing)) I wonder if tho:se are the bits: that were in yo:ur
 251 s:kin, Hanna. >Do you think.<=
 252 Han: =(Shaking head)) N:o:.,=
 253 SHE: =N:o:.,?
 254 (0.4)
 255 Han: I[t ' s :]
 256 SHE: [(Do you-<)] ((Looks at Hanna))
 257 (1.9)
 258 Han: I don't kno:w w[had it (was.)]
 259 SHE: [You don't kno]:w¿
 260 (0.4)
 261 SHE: Do you want me to re:ad it¿
 262 (0.2)
 263 Han: ((Nods)) Mm:,
 264 (2.1)
 265 SHE: It says, (0.4) that ticks can be a bit s:ca:ry, for people
 266 who go bush wa:lking, and ca::mpi::ng, (0.2) a::nd, doing
 267 activities in the Austra:lian bush.=There's no denying that
 268 ticks are ann:oying pests<but we::, nee:d not be disco:uraged
 269 if we understand the risks about how to reduc:e- ouh- it says
 270 >if we're< ca:reful, (0.2) and we try hard so the ticks don't
 271 get uonu us::.
 272 (1.3)
 273 Han: ((Shaking head)) I's: ((pointing)) not that
 274 <o[: n e . >] ((Looks at Sheree))
 275 SHE: [It's not that] ((scrolls down screen)) one¿=Well this o:ne,
 276 is a para:lysis tick.
 277 (1.1)
 278 Han: I don't think it was that on[e.]
 279 SHE: [Don]'t think it was that=
 280 =[one¿
 281 Han: =((Shaking head))
 282 SHE: [Let's see if there's a differen' ki:nd,]

Similar to Fragment 2A, at lines 250-251 of Fragment 2B Sheree again asks about the likeness between the tick on the screen (Figure 3) and the tick that was on Hanna. As in the previous fragment, Hanna responds by disconfirming the correspondence, and again without accounting for the difference. This rejection poses a problem, again, for the image search. Without a basis for appreciating the difference between the two ticks, it is not possible for Sheree to clearly identify the impediment to achieving the goal of their activity and what might be required to address that impediment.

In a context of ambiguity about the impediment to the image search, Sheree again occasions space in which reconciliatory information might be provided. This time, at line 253, she uses a questioning repeat, which initiates repair on Hanna's prior turn (Jefferson, 1972; Keel, 2011; Robinson, 2009; Robinson and Kevoe-Feldman, 2010; Robinson, 2013; Schegloff et al., 1977; Schegloff, 1997a). Sheree reproduces the entire trouble-source turn, establishing that her difficulty was not hearing the turn but rather making sense of it (Robinson and Kevoe-Feldman, 2010). Similar to Sheree's earlier question (line 169), this repeat seeks clarification (Robinson, 2013). Although this is followed by the possible beginning of an explanation (line 255), Hanna's eventual response disclaims relevant knowledge about the matter (line 258). In reply, Sheree again uses a questioning repeat to create further space for reconciliatory information (line 259). No response, however, is forthcoming from Hanna (line 260).



Sheree's pursuit of reconciliatory information to this point in Fragment 2B has not resulted in the outcome observed in Fragment 2A. In that earlier instance, Hanna provided an account for the difference between the two ticks – an account based on size – that enabled Sheree to infer and address an equivocal trouble. This has not been possible in Fragment 2B. The inability to identify divergent understanding means there is no basis to address a breakdown in intersubjectivity (Pollner, 1975; Schegloff, 1992). As established earlier, where it is not possible to infer and address an equivocal trouble, a secondary option is to progress the interaction without addressing that trouble. In doing so, it is possible that another opportunity will arise to identify and address the trouble. This is the course Sheree takes from line 261, which soon occasions another opportunity to identify a source of trouble.

Following Sheree's attempt to progress the interaction by reading information about ticks displayed on the screen (lines 265-271), Hanna again rejects the correspondence between the image on the screen and the tick that was on her (lines 273-274). Sheree in turn responds with a questioning repeat (line 275). As she repeats Hanna's prior turn, Sheree scrolls down the webpage, which displays a label "paralysis tick" for the image they have been inspecting. Sheree's informing of this additional detail (lines 275-276) may help overcome the impediment to their search, if Hanna knows the type of tick that was on her. This does not happen, however, with Hanna instead repeating her rejection of a likeness (line 278). Sheree again employs a questioning repeat to occasion space for reconciliatory information (lines 279-280). In this instance, however, the negative grammatical form of Sheree's repeat makes disconfirmation the preferred response (cf. Heinemann, 2005; Heritage, 2010; Raymond, 2003). Hanna's production of this preferred response (line 281) means no reconciliatory information is forthcoming.

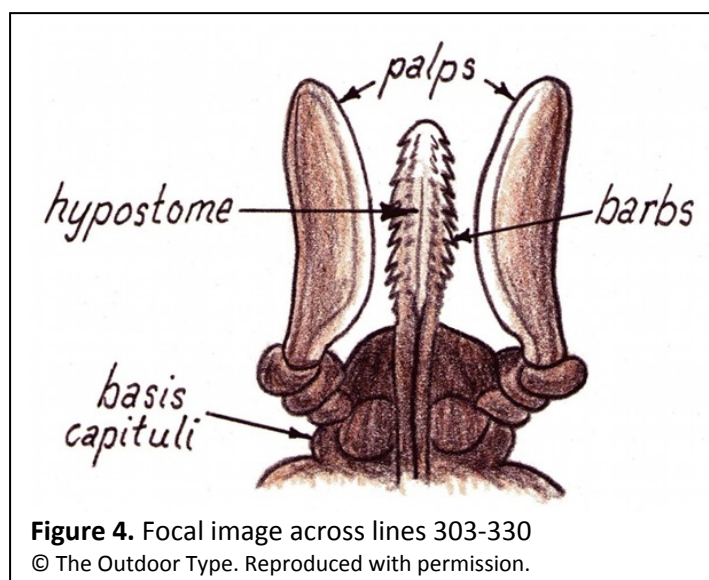
In spite of multiple attempts to occasion space for reconciliatory information to aid identifying and addressing the equivocal trouble, the absence of such information leaves little scope for Sheree other than to progress their activity. In this case, in data not shown here (but available in the appendix), Sheree continues to scroll down the same webpage, which results in the discussion of another image (Figure 4), as shown from the beginning of the next fragment.

Fragment 2C [KWeb: Centre 3, 17 Sep 2012, 07:16-08:06]

303 SHE: .hhh ((Pointing)) This i:s:, (.) this says the mo:u- this's the
 304 m:outh here; ((0.9; Moves finger around the base of the image,
 305 and then up to the barbs)) And tho:se bits there are called
 306 ba::rbs:, <and ((stops pointing)) I would sa:y, (.) >tha'

307 that<'s: (.) what got i:nto you Hanna,
 308 Han: ((Shakes head)) I don't think it wa::[s,]
 309 SHE: [Don]'t think ↑it wa::s:↑=
 310 Han: =((Shakes head)) N:o:p_
 311 (2.9)
 312 Sal: ((Looking at screen)) (He:rsendon:,)
 313 SHE: And >do you know< wha::t, (.) it's te-it's re-I:'m re:ading
 314 these wo:rds, and it says ↓that t↑icks are aro:und, in s:pring
 315 and s:ummer, And what ti:me of the ye:ar is it no:w?
 316 (2.3)
 317 Han: S:pri[: n g .]
 318 SHE: [It's s:]pring. Mm::..
 319 (2.6)
 320 SHE: They ca:n be po- a::h, <as a pois'nous animal they sh:ould be
 321 considered an <envi:ronmental> factor.
 322 (0.6)
 323 SHE: Mm::..
 324 (0.5)
 325 Han: >It didn-< (0.2) It had ((repeatedly touches thumb and index
 326 fingers together on both hands)) [l:idle=
 327 SHE: [(Moves hand to grasp mouse))
 328 Han: =cla[:w.]
 329 SHE: [tch] >It had little< >>claws.<< ((Starts scrolling down
 330 screen)) <I th:ink you're getting confu:sed becaus:e (1.0) they
 331 [look so [bi]:g.=

The first part of this fragment involves the same trajectory repeatedly observed above. Sheree refers to a potential correspondence (lines 306-307) and Hanna discounts this likeness without accounting for the difference (line 308). Sheree replies with a questioning repeat (line 309), occasioning space for reconciliatory information. No such information, however, is forthcoming (line 310). Once again, there is little scope to infer and address the equivocal trouble, and so again Sheree responds by progressing a broader activity (from line 313).



To this point, over three and half minutes have passed since the first instance (at line 179) in which there was scope for Sheree to infer an apparent misunderstanding. Now, at lines 325-328, a second opportunity arises, which is again occasioned by Hanna's reference to size.⁶ This is another basis for

⁶ Sheree has just been reading information displayed on the screen, and Hanna's mention of size is disjunctive with the topic of that information. Her use of past tense at lines 325-328, however, makes it clear that Hanna

Sheree to return to attributing their impediment to a misunderstanding by Hanna based on a scale error. Where Sheree previously (at lines 181-183) addressed this apparent misunderstanding by explaining the scale of the image on the screen, here (at lines 330-331) she takes the approach of attributing confusion (Drew, 2005).⁷ Their difficulty in locating an adequate likeness is thus accounted for by explicitly attributing misunderstanding to Hanna.

As it happens, Hanna does not respond to Sheree's attribution. As shown below, she instead orients to another image. In their ensuing interaction, however, there is another opportunity to address the equivocal trouble.

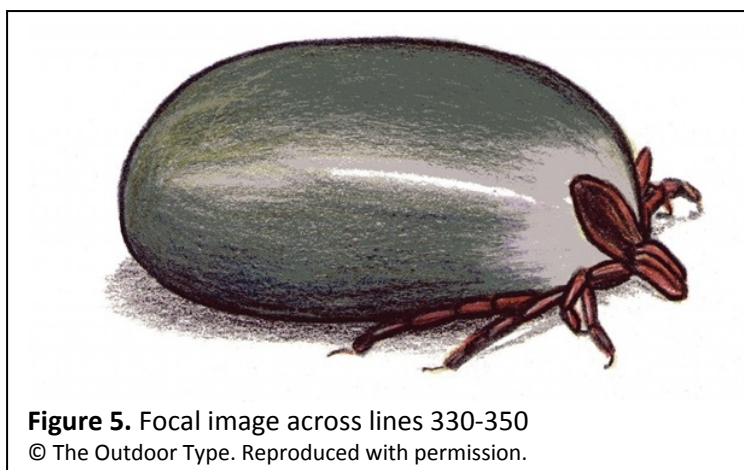
Fragment 2D [KWeb: Centre 3, 17 Sep 2012, 08:01-08:22]

330 SHE: <I th:ink you're getting confu:sed becaus:e (1.0) they
 331 [look so [bi:g.=
 332 [(New im[age appears as Sheree scrolls down the screen))
 333 Han: [((Suddenly sits forward in chair slightly and moves
 334 arm as if to point; then abruptly halts both these actions))
 335 Han: =((Pointing)) No that (o:ne,/the:re,)= ((NB: May not be a third
 336 morpheme here - it may be background talk))
 337 SHE: =Is that what it looked li:ke?
 338 Han: ((Stops pointing)) I don't think it wa:s:.=
 339 SHE: =Don't think it was like that.=.hh Was its body really big
 340 and swo:llen like this:..
 341 Han: ((Slight nod))
 342 SHE: >See how it's< really big,
 343 (0.5)
 344 SHE: ((Looks at Hanna))
 345 Han: ((Slight head shake)) N:o:.,=
 346 SHE: =N[o :]:[: ?]
 347 Han: [It-] [I'w]as really ti::ney:[:..
 348 SHE: [Wa]s i:t:z= ((Looks back towards
 349 screen))
 350 Han: =And it was s::till ali::[ve.]
 351 SHE: [O]kay.

Hanna and Sheree's discussion of another image follows a similar trajectory observed above and exposes another basis for inferring a misunderstanding based on a scale error. Sheree initially asks, at lines 339-340, whether the tick on Hanna was "really big and swo:llen" like the image displayed on the screen (Figure 5). Hanna possibly confirms this with a slight nod (line 341). Following this, however, Sheree comments that the tick on the screen is "really big," (line 342), to which Hanna responds by disconfirming a likeness (line 345). In the same way that Sheree has previously responded to disconfirmation of a likeness, here she occasions space in which reconciliatory information might be provided (line 346). As Sheree produces this repeat, however, Hanna continues to expand her turn (line 347), providing the very account Sheree is soliciting.

is referring to the tick that was on her the previous evening, rather than the tick currently displayed on the screen.

⁷ Although Sheree begins her turn with a repeat of Hanna's prior turn, this is not produced with rising intonation like the other repeats we have considered. The falling intonation at the end of this repeat appears to accomplish confirmation (Schegloff, 1997a), rather than pursuit of the matter being repeated.



Similar to the explanations provided at line 179 and lines 325-328, Hanna's explanation here provides a basis for Sheree to infer that Hanna has misunderstood the scale of the image on the screen. This time, however, Sheree responds in a way that proves to be successful in addressing the apparent impediment to their search.

Fragment 2E [KWeb: Centre 3, 17 Sep 2012, 08:17-08:45]

347 Han: [It-] [I'w]as really ti::ney:[:.]
 348 SHE: [Wa]s i:tɿ= ((Looks back towards
 349 screen))
 350 Han: =And it was s::till ali::[ve.]
 351 SHE: [O]kay. ((Starts scrolling up the
 352 webpage)) (.hh) Do you wanna see >if we c'n< find som::e u::hm
 353 (0.6) tch (0.8) ((clicks back to previous webpage, containing
 354 the picture of the tick life cycle)) some pictures of them
 355 [o:n someone's skin=
 356 Han: [((Slight nod?))
 357 SHE: =((clicks back to previous webpage, containing results of their
 358 image search)) [ma:ybe?]
 359 Han: [((N o d)s))
 360 (2.1)
 361 SHE: ((Starts moving cursor)) The:re's one on one, ((Points to image
 362 with cursor)) L_ook.
 363 (0.5) ((Sheree moves cursor to another image))
 364 SHE: .huh! Was it like th_ɹa:t?
 365 (0.5)
 366 Han: ((Nodding)) Ye_a:h. [((Continues nodding))]
 367 SHE: [I s t h a t w h]at it looked li:ke?
 368 Han: ((Nods)) Ye_s:[:.]
 369 SHE: [Yeaɿ
 370 (0.7)
 371 SHE: °Mmkay,°
 372 (0.2)
 373 SHE: Do you >want me t'< copy th_ɹa:t one?
 374 Han: ((Nods))

Hanna's third mention of the size of the tick that was on her (line 347) occasions another opportunity for Sheree to infer and address the equivocal trouble impeding their search. To reiterate, that trouble is equivocal because there are at least two possible explanations that could account for the impediment. The first is that they simply have not managed to locate an adequate likeness. A second possibility is Hanna has misunderstood the scale of the images they are looking at, and this is impeding their ability to locate an adequate likeness.

In her previous attempts to identify and address this equivocal trouble, Sheree utilised two different approaches. Her first approach involved explaining how a tick on the screen could be the same size as the tick that was on Hanna, even though they appeared different (lines 181-183). Sheree's second approach involved attributing confusion to Hanna (lines 330-331). Her third attempt involves circumventing the basis for a misunderstanding by suggesting they locate images of ticks on a person's skin (lines 352-355). If Hanna has indeed made a scale error, Sheree's suggestion of focusing on images of ticks in scale should circumvent the basis of this error. This approach proves successful. At lines 361-362, Sheree nominates a candidate likeness. She then continues to scroll down the screen and, at line 364, nominates another possible likeness (Figure 6), which Hanna confirms (line 366). The practices used by Sheree have culminated in the resolution of an apparent trouble by circumventing the basis of that trouble, rather than finding a more direct way to address it.



Figure 6. Focal image across lines 364-374

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Source: <http://www.flickr.com/photos/22089212@N05/2970665359/>

Although Sheree seems to have identified a possible misunderstanding in the early stages of their image search, it takes time and repeated attempts to implement an approach that appears to successfully remove the impediment to the search. Her eventual success comes from circumventing the conditions under which Hanna could be potentially misunderstanding what they are looking at, rather than directly addressing that possible misunderstanding. The approach taken by Sheree suits the equivocal nature of the trouble she seeks to address. Although there is evidence supporting Sheree's apparent inference that Hanna has made a scale error, at no point does this misunderstanding become absolutely clear. The strategies employed by Sheree suit this equivocality.

Conclusion

Our analysis progresses understanding about addressing breakdowns in intersubjectivity, predominantly studied in the past with a focus on repair of ostensible trouble, by examining how *equivocal* trouble can be addressed. Exploring an interaction between a teacher and preschool-aged student in which it was unclear whether they shared the same understanding of the images they were examining, this study has identified practices used by one party in attempts to identify and address a possible misunderstanding that may be impeding the success of their activity. This analysis contributes to existing research that explores practices people use to preserve intersubjectivity (Heritage, 1984; Schegloff, 1992; Schegloff, 2006). It provides further demonstration of the potential for conversation analytic research in this area, by extending existing findings about how repair practices are used to defend intersubjectivity by exploring how equivocal troubles are addressed.

In each instance where an equivocal source of trouble emerged, the recipient to that trouble initially occasioned space in which reconciliatory information could be provided (Robinson, 2009). Most often, this was accomplished by repeating a version of the turn exposing the equivocal source of trouble. Although these repeats initiated repair (Keel, 2011; Jefferson, 1972; Robinson, 2013; Robinson, 2009; Robinson and Kevoe-Feldman, 2010; Schegloff, 1997a; Schegloff et al., 1977), they did not resolve the equivocal trouble. Rather, they created space for information that might facilitate identification of the trouble. Where information was forthcoming, the party who initiated repair used this to infer and address a source of trouble.

Where further information was not forthcoming, or where an attempt to identify and address a source of trouble failed, a secondary option was to continue some broader activity without attempting to identify and address the source of trouble. By progressing the activity, it is possible another opportunity may arise to address the trouble (Schegloff, 1992). The practices used by Sheree in the fragment analysed here suggests a particular type of preference for progressivity (cf. Stivers and Robinson, 2006): where equivocal trouble emerges and cannot be addressed, attempt to progress a broader activity-in-progress with the prospect that further opportunities may arise to address it.

In taking a conversation analytic approach, this study has identified practices that are demonstrably relevant to participants. Although informed by relevant prior research, the specific avoidance of pre-theorised global orders of discourse enables an analytic enterprise for identifying methodical procedures people use to deal with the local contingencies of social interaction (Macbeth, 2003; Schegloff, 1997c). Our study explores one particular contingency – equivocal misunderstanding – and methodical procedures for ordering a social interaction affected by this contingency: the use of repair to create space for reconciliatory information and, in the absence of any reconciliatory information, progress of some broader activity without attempting to identify and address the source of trouble.

Each instance where the recipient to an equivocal trouble eventually manages to infer and address that trouble was achieved with alternatives to repair: explanation (lines 181-183), accounting (lines 329-331), and finally circumventing the potential basis for a misunderstanding (lines 351-368). These alternatives suit contexts in which it remains unclear whether there indeed has been a misunderstanding that needs to be addressed. Our expectation is that interactants may not adopt such approaches when solicitations of reconciliatory information occasion displays of ostensible rather than equivocal misunderstandings. Where this occurs, a major constraint on the use of third position repair is overcome (Schegloff, 1992). What appears crucial, then, is the strength and quality of any reconciliatory information that becomes available.

The three practices used to address the equivocal trouble also appear to involve not treating the student as being competent in appropriately understanding what she has looked at on the computer screen. Although her general capacity to identify a tick that resembled the one that was on her is recognised, her specific ability to comprehend the scale of the images on the screen is questioned. Students – particularly young students – appear to be routinely subject to such circumstances where their competence is simultaneously assumed and denied (Mackay, 1974; Baker and Freebody, 1989). We therefore expect that the practices we have considered may be more prevalent in settings where one party's competence is liable to being questioned.

Identifying and addressing misunderstandings is an important interactional achievement, insofar as misunderstandings can jeopardise interactants' ability to mutually accomplish a course of action (Ekberg, 2012; Pollner, 1975; Schegloff, 1992). Although the turn-by-turn display of participants' understandings and practices of repair provide a basis for defending intersubjectivity, our study

explores instances that prove difficult to address with this “self-righting mechanism” for interaction (Schegloff, 1992: 1299). Such instances can be pivotal in educational settings. Here the core business is to increase and enhance knowledge, and yet this achievement is contingent on participants establishing intersubjective understandings that enable the shared activities of the classroom to progress (Macbeth, 2011). By focusing on particular equivocal trouble in understanding, we have identified practices used in attempts to preserve the intersubjectivity required in education and, presumably, in social life more generally.

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Appendix

[KWeb: Centre 3, 17 Sep 2012, 00:32-09:15]

001 SHE: Wha'd'ya'wanna fi:nd o:ut gi:rls:,
 002 (.)
 003 SHE: What [do you wanna] do:?
 004 Nao: [T i c k s :.]
 005 SHE: Wha- what do you want to:: what do you want to
 006 kno[:w about the tee]h s]
 007 Nao: [D o c t ' r s .] hehah!
 008 (0.3)
 009 Han: (The sut) on my ba[ck.]
 010 SHE: [Y]ou wanna know- do you wanna know
 011 SHE: what it looks li:h[ke? (.) Is th]at what you're a:fter;
 012 Han: [((Nodding))]
 013 Han: Mm:hm,
 014 (5.2)
 015 SHE: We'll go into the interne:t,
 016 (5.4)
 017 SHE: tch So I'm just gonna put in google image:s, (0.4) and the:n
 018 (.) I'll get you to ty:pe it.
 019 (1.4)
 020 SHE: Hanna?:
 021 (12.8)
 022 SHE: Oka::y,
 023 (.)
 024 SHE: [>Do you re<member what it sta::rted with? The word tick,
 025 Han: [((Reaches out and starts to hold the mouse))
 026 SHE: Thh!Thh!Thh!
 027 St?: Tee..
 028 SHE: Tee, So can you fi:nd the tee;
 029 (0.8)
 030 SHE: (Here?/Yeap?)
 031 (0.8)
 032 St?: Uh::m,=
 033 SHE: =(Moves to take control of the mouse)) You don't nee:d that
 034 da:rling. ((Points to keyboard)) You need to f:ind the tee
 035 over he:yah,
 036 (1.2)
 037 Sal: ((Points to keyboard)) Tee..
 038 Han: ((Moves finder to keyboard))
 039 (1.8)
 040 Han: ((Looks at Sally) Is that te[e?]
 041 SHE: [Th]at's it. Yep.
 042 (0.8)
 043 SHE: Oup! Wro:ng one,
 044 (1.8)
 045 Han?: ()
 046 (1.1) ((Hanna and Sally looking at and pointing to keyboard))
 047 Sal: Uhm [(right)]
 048 SHE: [Hang on,]
 049 Sal: That's tee there.
 050 Han: Oh.
 051 (.)
 052 SHE: Tee, and then you need an e::ye,
 053 (0.6) ((Hanna leans forward and looks at keyboard))
 054 Han: (Where's tha:t;
 055 (.)
 056 Sal: (Uhm,) (.) (I don't kn[ow])
 057 Han: [O :]h

058 (1.8)
 059 SHE: E:ye like the [l:a:st one in [your- that's it.] Yep.
 060 Sal: [((Points to key[board])]
 061 Han: [((Starts to move hand towards
 062 keyboard))
 063 (1.1)
 064 Han: ((Pointing at keyboard)) And that one,
 065 (0.4)
 066 Sal: ((Shaking head)) No that's oh.
 067 (0.6)
 068 St?: No this, one goes a:fter oh
 069 St?: ()=
 070 SHE: =We'll just have to BACK s:pace because we've got the wro::ng,
 071 (0.4) ((pointing)) This one he:re Han.
 072 (.)
 073 SHE: Eye.
 074 (0.6)
 075 SHE: And then you need <a cee,>
 076 (1.1) ((Hanna and Sally lean in and inspect keyboard))
 077 Sal: S:::cee, ((Presses key))
 078 (2.0)
 079 Han: This one?
 080 (0.2)
 081 Sal: Ye:h that's because I: pressed it.=
 082 SHE: =A::nd a:h ouh we've got a dee that we don't need. And we need
 083 a ka:y:,
 084 (0.5)
 085 Sal?: Ka:y,<where's a kay?
 086 (0.4)
 087 Sal: ((Pointing)) Kay like in my mummy's name?=
 088 SHE: =tch And then you nee:d an ess:.
 089 Nao: Oh ess is for ((pointing)) (l:ays:.)
 090 (.)
 091 SHE: Oup hang on we've got an elle that we don't quite need. Just
 092 an ess,
 093 Sal?: (There/Yeh)
 094 Sal?: Ess, ess,
 095 (0.3)
 096 SHE: Okay,=
 097 Sal?: =Ess, es[s, ()]
 098 SHE: [No::w, H]anna:, you can click on the (0.2) one the
 099 blu::e, (0.3) s:tar,
 100 ((NB: A blue star sticker has been affixed to left mouse button))
 101 (7.6)
 102 SHE: A:h(h)!
 103 (0.3)
 104 Sal?: A:h
 105 SHE: tch [mm::[:,]
 106 Han: [((Po[inting to screen))]
 107 Han: [Is] that the o:ne?
 108 SHE: Is that what you think it would look [li:ike?]
 109 Han: [((Nodd]ing))=
 110 SHE: =Mmm<I:'m not sure.<did the doctor tell you what ki:nd of tick
 111 it was:?
 112 (3.1) ((Other children talking in the background throughout))
 113 SHE: This- this: one (0.2) looks like it might be one on someone's
 114 ski:n doesn't [i:t,]
 115 Han: [((No]ddi[ng))]
 116 SHE: [All swo]llen up.
 117 (.)
 118 SHE: Do you want to:, (.) pick out a couple of pictures:?

119 Han: ((Nodding))
120 SHE: An' then: uhm:<you tell me which pictures you li::ke,
121 (0.5)
122 Han: I l:ike that ((pointing)) on[e.]
123 SHE: [>Y]ou want< that one,
124 (.)
125 SHE: Mmkay
126 (1.2)
127 SHE: I'll see if I can copy::,
128 (7.8)
129 Sal?: T↑icks::.
130 (1.0)
131 Han?: °Yeh.°
132 (0.8)
133 Sal: (Ti[cks.])
134 Han: [D e e]:: da:h
135 Sal?: (°°C'mon°°)
136 Han: Dee gah ja:hn, dee dee hmm hmm (.) hmm
137 SHE: °I'll just try again ((pivots to look behind herself))
138 Hanna,°
139 Han?: Hmm
140 (0.9)
141 SHE: U::hm:, bo::[ys,]
142 Han?: [T↑i]ck!
143 (0.3)
144 SHE: Ja:iden:, that wasn't (.) a gun so:und >that I heard< (in the
145 office,)
146 (2.1) ((Background conversation; not clear if Jaiden
147 replies to Sheree))
148 SHE: ((Turns to face computer)) >Think it might'a'b<een,
149 (2.2)
150 SHE: O::h<I s:ee what you were s:a:ying Hanna about the bits that
151 stick ↑in↑to you. Look at tha:t.
152 (1.8)
153 SHE: We'll try: agen and >see if we can get it< to copy,
154 (4.1)
155 SHE: .huh! There we go::,
156 Nao: ((Referring to Sheree's double ear piercings)) You've got you:r
157 (0.8) ears [twi:ce.]
158 SHE: [I- I:] do: have two: I do:.
159 (0.9)
160 Nao: You got it twi: [ce.]
161 SHE: [I] do:,
162 (.)
163 SHE: Yep.
164 (0.2)
165 SHE: Are there any other pictures [that you wanted Hanna?<Is] this-
166 Han: [((N o d d i n g))]
167 SHE: is it- does this one look like the one that was on you:?
168 Han: ((Bobbles head from side to side and scrunches face)) N:o::.=
169 SHE: =↑It doesn't↑
170 (0.2)
171 Han: [It [it- [it (was-)]
172 Sal: [Is [it [s i m i l]ar?=
173 Han: =((Turns to face Sheree)) It was a <little one.>
174 SHE: >Oh was a little one< [was it.<Okay let's have a look then.
175 Han: [((Turns to face computer))
176 (2.1)
177 Sal: Whic[h one wa]s it Hanna?
178 SHE: [O:kay,]
179 Han: It ha:s little cla::w, (0.4) (°a:nd u:hm:°) (0.2)

180 Nao?: (Din son wo)=
181 SHE: =This one- this one would actually be quite little it's just
182 that they've <blo:w>n it up. Like under a magnifying glass to
183 make it look big.
184 Han: ((Pointing)) I don't th:ink it's ((starts moving finger)) that
185 one. It's ((points to another part of the screen)) that ((stops
186 pointing)) one ma:ybe:.=
187 SHE: =You think it might be that one,
188 Han: ((Nods once)) Yes:.
189 SHE: °T-° Is there anothe:r (0.2) O:uhl<look he:re what I can see.
190 Do you know what that is?
191 Han: ((Nods)) Uh hah,=
192 SHE: =What's 'a:t;
193 (0.6)
194 Han: S:::.,
195 SHE: It says e:ggs, la::rva:e, (1.3) n:ymph, (0.2) and a:dult. And
196 it goes around and aro:und.
197 (0.5)
198 Han: Round in a ci:rcle.=
199 SHE: =An' it goes round in a ci:rcle.=
200 Han: =[<Like the]
201 Nao: =[(Like a] t_↑og [fop thing.)]
202 Han: [Like- the-] (.) <frog cycle.>
203 (0.2)
204 Han: F:ro:g cy:[cle.]
205 SHE: [L:i]ke the f:rog=
206 =[cy:cle. Yeah. >Should we< c_↑opy that] one do you
207 Sal: =[Uhm missus Stu:mpie I:'ve got (a-)]
208 SHE: [th_↑ink?]
209 Sal: [Mi[ssus] S:tu:mpie: I:'ve go[t (h e r o)]=
210 SHE: [((Turns to look at S[ally)
211 Han: [((Pointing)) That one.]
212 Sal: =t_↑i:cks:..
213 SHE: tch A:lr>igh'< .hh ((Turns to face computer)) You >wan-< and
214 >what about< this wheel.<'n' wi-this one as well;<Ma-[And you
215 Han: [((Nods))
216 SHE: kn:ow what we could do: with that, we could sho:w the other
217 boys and gi:rls. hey,
218 Han: ((Slight nod))
219 (3.6)
220 Han: ((Turns to look behind herself))
221 SHE: The:re >you go< Han:.,
222 Han: ((Turns to face computer))
223 (4.6)
224 SHE: >So this< one h_↑ere?
225 Han: ((Nods))
226 (6.0)
227 Han: What happen'd (.) on her a:rm:
228 (1.4)
229 SHE: U::hm-
230 (.)
231 Han?: °What happened:°
232 (1.0)
233 SHE: Mm:, (1.3) not shu:re.
234 Han: What ((pointing)) happens on her a:rm?
235 (0.6)
236 SHE: tch O:h, (0.2) I'll tell you about that >in a< minute, Hang on,
237 (0.2)
238 SHE: Cos we have to copy this:..
239 (0.5)
240 SHE: Sometimes they do:n't want to:i, (1.4) copy.=but the:re's

241 i:nforma:tion behind the:re so let's have a look at tha:t.
 242 (3.0)
 243 SHE: There we go↑:,
 244 (1.5)
 245 SHE: If I clo:se this, there's some i:nforma:tion here. Look. It
 246 s:a:ys, t↑icks: a:nd pe:opl:e, in the Austra::lian bush:.
 247 (0.4)
 248 SHE: And the:re's one the:re look.
 249 (0.2)
 250 SHE: ((Pointing)) I wonder if tho:se are the bits: that were in yo:ur
 251 s:kin, Hanna. >Do you think.<=
 252 Han: =((Shaking head)) N:o::,=
 253 SHE: =N:o::?
 254 (0.4)
 255 Han: I[t ' s :]
 256 SHE: [(>Do you-<)] ((looks at Hanna))
 257 (1.9)
 258 Han: I don't kno:w w[had it (was.)]
 259 SHE: [You don't kno]:w¿
 260 (0.4)
 261 SHE: Do you want me to re:ad it¿
 262 (0.2)
 263 Han: ((Nods)) Mm:,
 264 (2.1)
 265 SHE: It says, (0.4) that ticks can be a bit s:ca::ry, for people
 266 who go bush wa:lking, and ca::mpi::ng, (0.2) a::nd, doing
 267 activities in the Austra:lian bush.=There's no denying that
 268 ticks are ann:oying pests<but we::, nee:d not be disco:uraged
 269 if we understand the risks about how to reduc:e- ouh- it says
 270 >if we're< ca:reful, (0.2) and we try hard so the ticks don't
 271 get don↓ us::.
 272 (1.3)
 273 Han: ((Shaking head)) I's: ((pointing)) not that
 274 <o[: n e . >] ((Looks at Sheree))
 275 SHE: [It's not that] ((scrolls down screen)) one¿=Well th↑is o:ne,
 276 is a para:lysis tick.
 277 (1.1)
 278 Han: I d↑on't think it was that on[e.]
 279 SHE: [Don]'t think it was that=
 280 =[one¿
 281 Han: =((Shaking head))
 282 SHE: [Let's see if there's a differen' ki:nd,]
 ((Four lines omitted involving interaction with a non-participant in the study))
 287 SHE: =O:h look,>have a look< he:re Hanna,
 288 Han: ((Looks at screen))
 ((Thirteen lines omitted involving interaction with a non-participant in the study))
 302 (.)
 303 SHE: .hhh ((Pointing)) This i::s:, (.) this says the mo:u- this's the
 304 m:outh here¿ ((0.9; Moves finger around the base of the image,
 305 and then up to the barbs)) And tho:se bits there are called
 306 ba::rbs:,<and ((stops pointing)) I would sa::y, (.) >tha'
 307 that<'s: (.) what got i:nto you Hanna,
 308 Han: ((Shakes head)) I don't think it wa::[s,]
 309 SHE: [Don]'t think ↑it wa::s:??↑=
 310 Han: =((Shakes head)) N:o:p_
 311 (2.9)
 312 Sal: ((Looking at screen)) (He:rsendon:,)
 313 SHE: And >do you know< wha::t, (.) it's te-it's re-I:'m re:ading
 314 these wo:rds, and it says ↓that t↑icks are aro:und, in s:pring

315 and s:um^{mer}, And what ti:me of the ye:ar is it no:w?
 316 (2.3)
 317 Han: S:prⁱ[: n g .]
 318 SHE: [It's s:]prⁱng. Mm::..
 319 (2.6)
 320 SHE: They ca:n be po- a::h, <as a poⁱs'nous animal they sh:ould be
 321 considered an <envi:ronmental> fa^ctor.
 322 (0.6)
 323 SHE: Mm::..
 324 (0.5)
 325 Han: >It di^dn-< (0.2) It had ((repeatedly touches thumb and index
 326 fingers together on both hands)) [l:ide=
 327 SHE: [((Moves hand to grasp mouse))
 328 Han: =cla[:w.]
 329 SHE: [tch] >It had li^{tt}le< >>claws.<< ((Starts scrolling down
 330 screen)) <I th:in^k you're getting confu:sed becaus:e (1.0) they
 331 [look so [bi:g.=
 332 [((New im[age appears as Sheree scrolls down the screen))
 333 Han: [((Suddenly sits forward in chair slightly and moves
 334 arm as if to point; then abruptly halts both these actions))
 335 Han: =((Pointing)) No th^{at} (o:ne,/the:re,)= ((NB: May not be a third
 336 morpheme here - it may be background talk))
 337 SHE: =Is th^{at} what it looked li:ke?
 338 Han: ((Stops pointing)) I don't think it wa:s:..
 339 SHE: =Don't think it was like that.=.hh Was its body really bi^g
 340 and swo:llen like this:..
 341 Han: ((Slight nod))
 342 SHE: >See how it's< really bi^g,
 343 (0.5)
 344 SHE: ((Looks at Hanna))
 345 Han: ((Slight head shake)) N:o::,=
 346 SHE: =N[o :]:[: ?]
 347 Han: [It-] [I'w]as really ti::ney[:..
 348 SHE: [W]a[s i:t]= ((Looks back towards
 349 screen))
 350 Han: =And it was s::ti^{ll} ali::[ve.]
 351 SHE: [O]kay. ((Starts scrolling up the
 352 webpage)) (.hh) Do you wanna see >if we c'n< fi:nd som::e u::hm
 353 (0.6) tch (0.8) ((clicks back to previous webpage, containing
 354 the picture of the tick life cycle)) some pi^ctures of them
 355 [o:n someone's skin=
 356 Han: [((Slight nod?))
 357 SHE: =((clicks back to previous webpage, containing results of their
 358 image search)) [ma:ybe?]
 359 Han: [((N o d)s))
 360 (2.1)
 361 SHE: ((Starts moving cursor)) The:re's one on one, ((points to image
 362 with cursor)) L^ook.
 363 (0.5) ((Sheree moves cursor to another image))
 364 SHE: .huh! Was it like th^a:t?
 365 (0.5)
 366 Han: ((Nodding)) Ye^a:h. [((Continues nodding))]
 367 SHE: [I s t h a t w h]at it looked li:ke?
 368 Han: ((Nods)) Ye^s[:..
 369 SHE: [Y]eah;
 370 (0.7)
 371 SHE: °Mmkay,°
 372 (0.2)
 373 SHE: Do you >want me t'< copy th^{at} one?
 374 Han: ((Nods))
 375 (6.6)

376 SHE: tch I'll put this on o:ur, (.) i:nformation here,
 377 (3.6)
 378 SHE: Hanna, >do you wanna< tell me a:nything about the tick an' I can
 379 ty:pe your wo:rds on for you °if you like°
 380 (0.6)
 381 Han: U:hm, (0.4) we:ll, (.) he put (.) his cla::ws into me[:,]
 382 SHE: [O]kay.
 383 (0.5)
 384 SHE: °Hanna (you'll-)
 385 (0.7)
 386 SHE: >Do you want me t'< ty:pe it, or do you wanna have a go:..
 387 (0.4)
 388 Han: ((Reaches for mouse)) Me: have a go.=
 389 SHE: =°Okay°
 390 ((Activity at the computer continues))